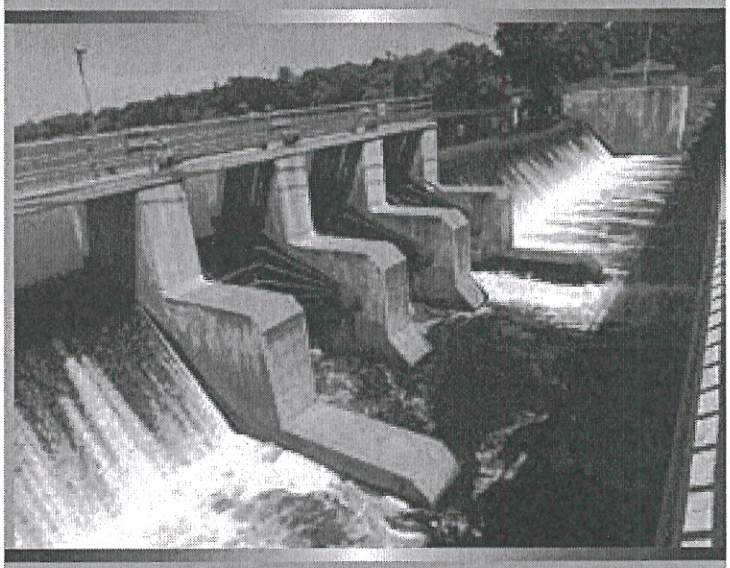
WATER SUPPLY CONSUMER REPORT

Annual

WATER QUALITY REPORT

Reporting Year 2013



Presented By

Elk River Municipal Utilities

POWERED BY NATURE

POWERED TO SERVE

PWS ID#: 1710004

There When You Need Us

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2013. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our customers.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

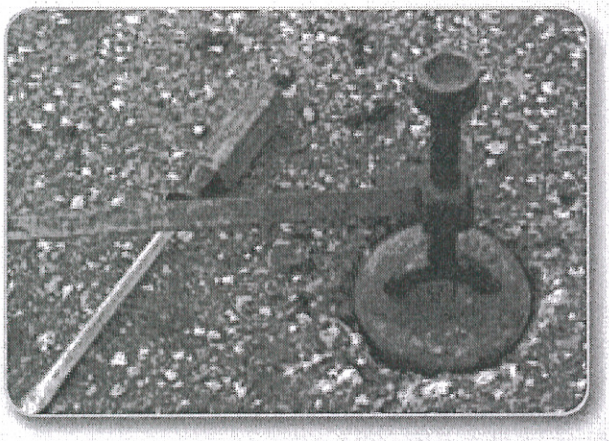
Check It Out!

www.elkriverutilities.com has a brand new look! You can view our current and past Annual Water Quality Reports on our Web site, along with tons of useful information!

Something Everyone Should Know

Where's your curb-stop?

First off, do you know what your curb-stop is? It is the outside water shut-off. It generally dwells in the driveway or lawn. At times, it has random placements. It is wise to know where your curb-stop is located because it can help you in a water leak emergency. Sometimes the curb-stops can be several feet below grade or covered by tar/asphalt. Be sure to locate it and take measurements. By doing so, it helps if you were ever to have plumbing repaired and the primary valve inside wasn't functioning.



Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Eric Volk, Water Superintendent, at (763) 441-2020.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Commercial Irrigation Water Conservation Rebate

If you are a commercial customer, this may be your ticket to saving on water costs. In order to apply, you must have an irrigation meter, which is charged an irrigation rate. It is a point-based program that requires 10 conservation points on the initial start-up year. Each year after, 5 points are needed to stay active on the program. By being on the program, you will be exempt from the Third Tier water rate ($4.00). Beyond the tremendous savings of the water rate reduction, you also save by your water conservation practices that you use to stay on the program. It's a double WIN! There are also rebates within the program for supplies you use to obtain points. Rebates include: irrigation inspections, irrigation heads, rain garden installation, black dirt for grass, etc . Please contact us and check our Web site for further information.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.

Smart Rebate

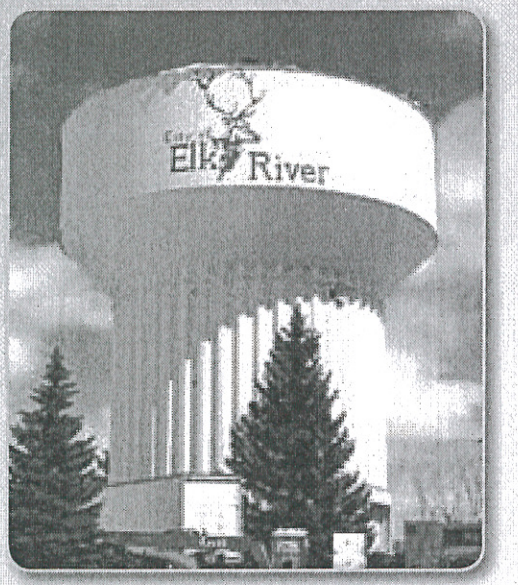
Saving water has never been so easy!!! Get up to $250 (average summer use below 250 units) or $500 (average summer use above 250 units) when you install approved irrigation controllers. SMART irrigation controller rebate users have saved an average of 43% of water since we started our rebate in 2009. Look at our Web site to see how you can save $ and water! Please contact our offices before controller purchase.

Hydrant Maintenance Program

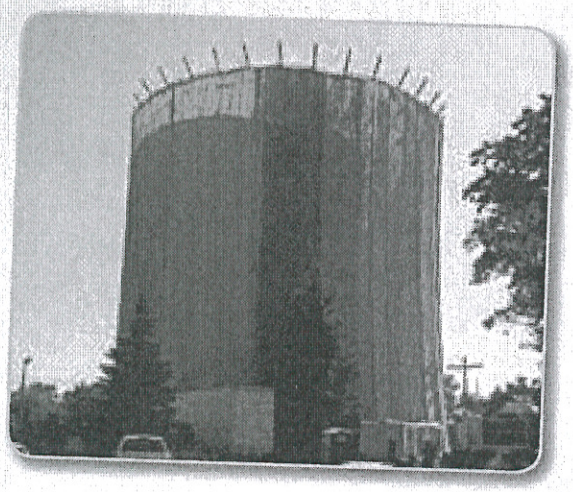
Commercial customers have the opportunity to sign up for our new Hydrant Maintenance Program. It includes an annual inspection, tune-up, and flushing. There is a small fee associated with the program, but for the safety of fire protection and insurance coverage, the program will ensure hydrants are working properly, if an emergency were to arise. Please contact our offices with any questions or for sign-up.

Freeport Tower

The Freeport Tower is donning a new coat of paint!



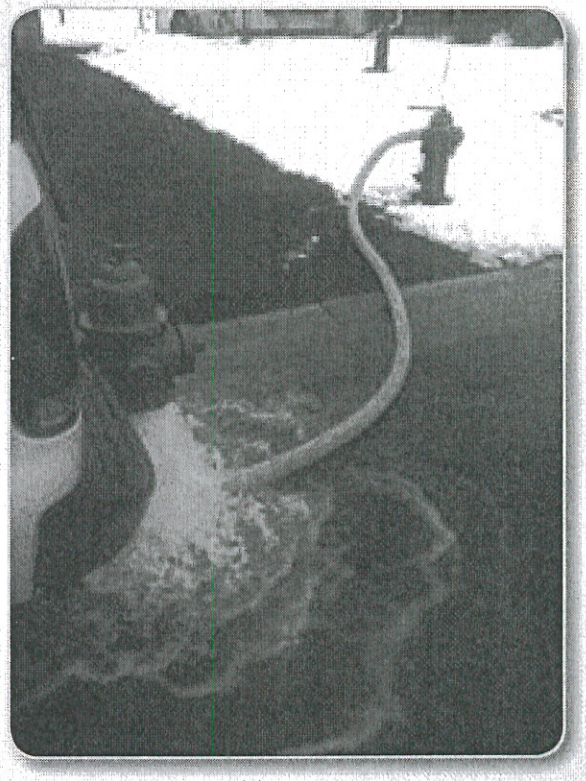
BEFORE



AFTER

Hydrant Flushing

Each spring (and sometimes fall) we flush our hydrants to clean the water mains. This is performed to clean water mains and to maintain high levels of water quality. If you encounter any aesthetic changes like red/brown water color to unusual odors, please refrain from washing clothes and run your cold water to see if it passes within 15-20 minutes. If it does not return to normal, please call our offices and we will be back in the area to flush again.

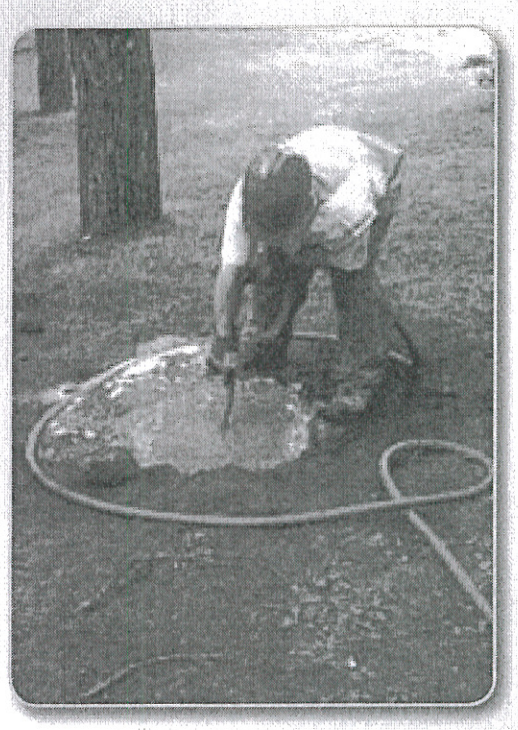


2014 Frozen Waterlines

Frozen... It may be this year's blockbuster of choice, but not a great situation for waterlines. After a cold winter, we are happy for the summer to be back. We had an unprecedented amount of frozen water lines, 42 to be exact. Generally, we see zero to two freeze-ups each year. What can you do to reduce the potential for freezing lines?

- Check your water temperature. It should be warmer than 38 degrees.
- Run water, a pencil width is advisable and even faster water flow is needed if the temperature goes below 38 degrees and makes its way closer to freezing (32 degrees).
- Snowbirds, please have your water shutoff at the curb (outside) to reduce freezing issues.

Well Sealing Cost Share Opportunity



The Sherburne County Soil & Water Conservation District (SWCD) has recently received a grant for source ground water protection from The Minnesota Department of Health (MDH). Funding for the Source Water Protection Grant Program comes from the Clean Water Land and Legacy Amendment Fund. We are working together to assist Elk River Wellhead Protection Management Zone residents with sealing their unused/abandoned wells. No work may start before project approval in order to receive grant funding assistance. The SWCD will fund up to 50% cost-sharing to the landowner for sealing and ERMU will provide additional funds, up to 75% for high priority wells. Contact our offices to obtain further information and application documents regarding the Well Sealing Cost Share Program at (763) 441-2020.

The Clean Water Fund: Protecting and restoring Minnesota's waters for generations to come.

Wellhead Protection & Storage Tank Awareness

We were approved for our 20-year Wellhead Protection (WHP) Plan in 2013. In the next 20 years, we will be completing different action strategies in order to meet Minnesota Department of Health standards. The WHP Plan is implemented to ensure that we are educating the community and utilizing best practices for water protection.

One of our strategies is to inform fuel tank owners about tank containment and leak protection. We want to ensure that harmful chemicals do not leech down into our water source. It is imperative to protect all wells from contamination. Be sure to check out our WHP information on our Web site for further information. The water we have today is the water we will have for future generations.

Elk River's Water Source and System

Elk River Municipal Utilities (ERMU) customers are supplied with water from eight wells ranging from 225 to 406 feet in depth. Our wells draw ground water from the Mt. Simon Hinckley aquifer. ERMU's water system contains more than 75 miles of water mains, which serve approximately 4,600 customers. Our treatment facilities provided more than 785 million gallons of clean drinking water in 2013. We currently have four water towers that have a total storage capacity of 4 million gallons of water.

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2013	2	2	0.02	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2013	[4]	[4]	0.68	0.5–0.8	No	Water additive used to control microbes
Fluoride (ppm)	2013	4	4	1.3	1.1–1.5	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA]–Stage 1 (ppb)	2013	60	NA	8.45	ND–8.9	No	By-product of drinking water disinfection
Nitrate (ppm)	2013	10.4	10.4	2	ND–2	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes]–Stage 1 (ppb)	2013	80	NA	9.3	0.4–10.1	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2013	1.3	1.3	0.21	1/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2013	15	0	2.4	1/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).